

REMARKS/ARGUMENTS

The Examiner rejects claims 1-5, 9-21, and 23-25 under 35 U.S.C. § 102(b) as being anticipated by Clancy et al. (U.S. 5,802,164) and claims 6 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Matheny in view of well known prior art.

Applicant respectfully traverses the Examiner's rejections. Neither Clancy, et al., nor Matheny teaches or suggests at least the following italicized features of the rejected independent claims:

1. A method for operating a voice-based telecommunications device, comprising:

(a) monitoring the voice-based telecommunications device for an *on-hook state*; and

(b) when the *on-hook state* is detected, automatically resetting at least one acoustic characteristic to a predetermined level, *wherein, when the telecommunications device is in an off-hook state, the acoustic parameter is freely adjustable by a user and wherein the acoustic parameter comprises a volume setting of a speaker of the device.*

9. A voice-based telecommunications device, comprising:
a state detector that detects an *on-hook state* of the telecommunications device; and

when the *on-hook state* is detected, an automatic reset that automatically resets at least one acoustic characteristic of the voice-based telecommunications device to a predetermined level, *wherein, when the telecommunications device is in an off-hook state, the acoustic parameter is freely adjustable by a user.*

17. A system for controlling operation of a telecommunications device, comprising:

detecting means for detecting an *on-hook state* of the telecommunications device; and

resetting means for automatically resetting at least one acoustic characteristic of the telecommunications device to a predetermined level, when the *on-hook state* is detected by the detecting means, *wherein, when the*

telecommunications device is in an off-hook state, the acoustic parameter is freely adjustable by a user.

In one configuration, the present invention is directed to resetting the volume or amplification level of a telephone headset or handset microphone to a determined level after each use. This is done by determining the state of the telephone. The volume is reset when the state of the phone changes to on-hook.

Clancy et al.

Clancy et al. is directed to a system including command generation circuitry for generating an enhancement command for transmission to the signal enhancement circuitry (Such as an echo canceller) and command reception circuitry for receiving the enhancement command from the command generation circuitry and selectively enhancing the portion of the signals on the per call basis according to the enhancement command. The signal enhancement circuitry is intended to remove noise , or a disturbance that is caused by sources other than an interfering signal and typically manifests itself as static. The signal enhancement command selectively enhances “the telephony signal on the per call basis according to the enhancement command.” (Col. 5, lines 66-67.) Clancy, et al., defines a “signal” as “a data packet, a data frame, a message, a sequence of data or any other variation of a physical quantity that may be used to convey information.” (Col. 4, lines 22-25.) Thus, a signal enhancement command is apparently sent on a per-signal basis during each call, the call comprising a number of discrete signals exchanged between the endpoints.

The circuitry further includes Automatic Volume Control (“AVC”) circuitry for adaptively adjusting the enhancing, as a function of a content of the signals carried on the corresponding channel(s). The AVC circuitry selectively amplifies portions of the baseband (e.g., 100 through 300 Hz) originally attenuated by RS-470 compliant telephone instruments. (Col. 1, lines 50-55, and col. 7, lines 12-17.) Resetting of the AVC circuitry resets the adjusting of the enhancing. “In adaptive enhancement, the selectivity or degree of enhancement is a function of the content of the signal being enhanced (analogous to automatic gain control (“AGC”).” (Col. 7, lines 19-22.) AVC resetting nullifies the undesired skewing caused by transient conditions. The AVC is reset after the termination of each telephone signal, such as to a 0 dB gain for the channel. Once reset, the signal enhancement circuitry 119a may suitably monitor ones of the communications channels through switch 115a and signal enhancement circuitry to detect the presence of a tandem control signal (i.e., a tag signal at 25 Hz).

Unlike the present invention, Clancy et al. (a) fails to reset the *user adjusted* volume level but rather resets a signal enhancement amplification level to eliminate the effects of interference and/or noise (Claims 1, 9, and 17); (b) fails to reset the volume to a default level *when the state of the phone changes from on-hook to off-hook* (Claims 1, 9, and 17); (c) fails to reset a speaker volume level (that is, by its nature, *independent* of the content of the signal being amplified) (Claim 1 and dependent Claims 16 and 19). Rather, Clancy et al. apparently resets the AVC after the termination of each telephone signal - which can happen repeatedly during a telephone call or while the phone is off hook. Clancy et al. will not reset the AVC when the phone changes from

on-hook to off-hook as telephone signals have already terminated before the state change. Additionally, Clancy, et al., AVC circuitry, by its very nature, “adaptively [adjusts] signal enhancing as a function of a content of one or more of a plurality of signals carried on a corresponding one of channels . . .” (Col. 7, lines 14-16 (Emphasis supplied).)

Matheny

Matheny is directed to a telephone that adjusts automatically the volume or amplification level of a telephone to a default setting. The arrangement provides a number of discrete, predetermined amplification levels selectable by the operator using a push-button switch 66. The amplification level is restored automatically to a volume associated with a normal hearing sensitivity at the start of a new call and a dial shunt circuit suppresses the DTMF tones heard by a user when tone dialing is used. The user adjusts the amplification level by manipulating the switch 66, which, in response, provides control signals to the counter 150. The counter in turn provides control signals Q1 and Q2 to the switching devices 136 and 144 causing one or both of the resistors 130 and 132 to be connected in parallel with resistor 126. The highest amplification level is realized when all three resistors are connected in parallel. The default or normal level is provided when only resistor 126 is connected.

At col. 7, lines 15-31, Matheny states:

To insure that the volume is associated with normal amplification level at the beginning of a new call, the binary counter 150 is reset *when the handset is taken OFF-HOOK*. The counter 150 includes a reset input 160 coupled to the junction of a series resistor 162 and capacitor 164 combination coupled between the

positive voltage and ground 90. *At the beginning of a new call, current flows through the resistor 162 and capacitor 164 combination to generate a reset signal on the reset lead 160 which forces the counter output Q1 and Q2 to a low voltage logic state thereby keeping the switching devices 136 and 144 in an OFF condition.* Consequently, the volume produced by the receiver transducer is associated with the normal amplification level because only resistor 126 is connected to the output terminal 124 when the counter output Q1 and Q2 are at a low voltage logic state.

(Emphasis supplied.)

Because the volume is not reset until the OFF-HOOK state, a shunt circuit must be provided to prevent hearing of amplified audio associated with the DTMF signals generated by the touchpad during dialing.

In contrast, the present invention returns automatically to the default parameter (e.g., volume level) when the ON-HOOK state is detected. This configuration avoids the necessity of using a shunt circuit to prevent the hearing of audio associated with the DTMF signals generated by the touchpad during dialing.

The claimed configuration is not obvious in view of Matheny because the claimed configuration is not possible using the design of Matheny. Matheny uses the current supplied to the telephone when it is taken off-hook to reset the volume. When the telephone goes on-hook, however no such current is provided to the telephone. The current to the telephone stops when the phone is hung up. (Col. 3, lines 54-59.)

The dependent claims provide additional reasons for allowance.

By way of example, dependent claims 3, 11, 15, 19, and 25 are directed to determining the state of the telephone by comparing an electrical parameter, such as current, in the headset/handset against a determined or selected threshold.

Dependent claims 4, 12, and 20 are directed to the use of a flag or state indicator value changes as the state changes.

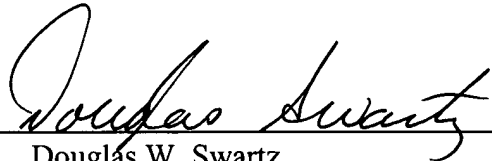
Dependent claims 8, 14, and 24 require the acoustic parameter not to automatically reset while the voice-based telecommunications device is in the off-hook state. As noted, Clancy, et al., teaches resetting the AVC after the termination of each telephone signal - which can happen repeatedly during a telephone call *or while the phone is off hook*. Clancy et al. teaches away from resetting the AVC when the phone changes from on-hook to off-hook as telephone signals have already terminated before the state change.

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Based upon the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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